

PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

To:

AWAPATENT AB
P.O. Box 45086
S-104 30 Stockholm
SUÈDE

Date of mailing (day/month/year) 07 June 2000 (07.06.00)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference 2008101	
International application No. PCT/SE99/01749	International filing date (day/month/year) 01 October 1999 (01.10.99)

1. The following indications appeared on record concerning:

☒ the applicant ☐ the inventor ☐ the agent ☐ the common representative

Name and Address

NET INSIGHT AB
Ingenjörsvägen 3
S-117 43 Stockholm
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State of Nationality

SE

State of Residence

SE

Telephone No.

Facsimile No.

Teleprinter No.

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person ☐ the name ☒ the address ☐ the nationality ☐ the residence

Name and Address

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State of Nationality

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State of Residence

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Facsimile No.

Teleprinter No.

3. Further observations, if necessary:

4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
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The International Bureau of WIPO
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1211 Geneva 20, Switzerland

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Authorized officer

C. Cupello

Telephone No.: (41-22) 338.83.38

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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

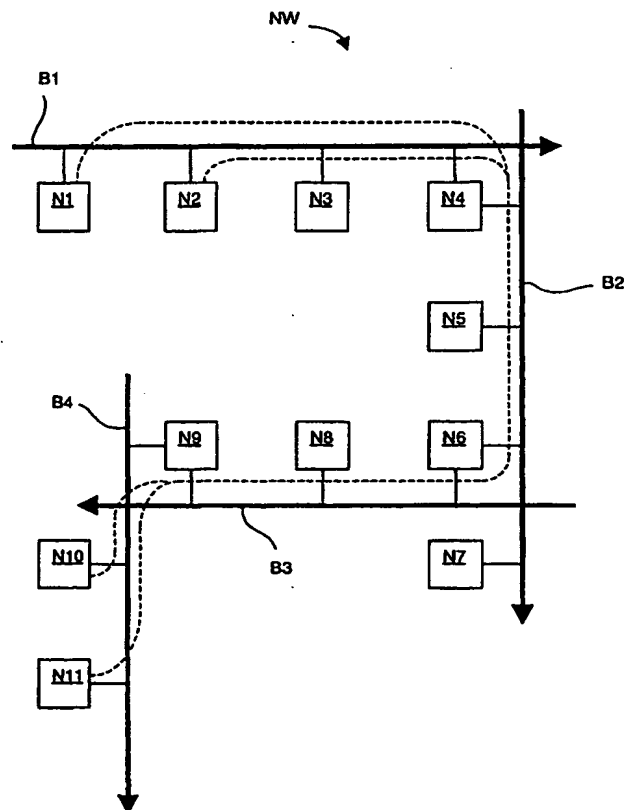
(51) International Patent Classification ⁷ : H04L 12/52, H04J 3/16, H04Q 11/04		A3	(11) International Publication Number: WO 00/21251
			(43) International Publication Date: 13 April 2000 (13.04.00)
(21) International Application Number: PCT/SE99/01749			(81) Designated States: AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), DM, EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
(22) International Filing Date: 1 October 1999 (01.10.99)			
(30) Priority Data: 9803351-7 2 October 1998 (02.10.98) SE			
(71) Applicant (for all designated States except US): NET INSIGHT AB [SE/SE]; Ingenjörsvägen 3, S-117 43 Stockholm (SE).			
(72) Inventor; and (75) Inventor/Applicant (for US only): DANIELSON, Magnus [SE/SE]; Kyrkvägen 3A, S-182 74 Stocksund (SE).			
(74) Agent: AWAPATENT AB; P.O. Box 45086, S-104 30 Stockholm (SE).			
(88) Date of publication of the international search report: 13 July 2000 (13.07.00)			

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With international search report.

(54) Title: METHODS AND ARRANGEMENT FOR ESTABLISHING COMMUNICATION CHANNELS IN A DTM NETWORK**(57) Abstract**

The present invention relates to methods and an arrangement for establishing communication channels in a DTM network. According to the invention a DTM channel is established from a first node (N4) to a second node (N9) via one or more intermediate nodes (N5, N6, N8). Furthermore, a set of one or more DTM channels are established within said DTM channel, typically using control signaling between said first node and said second node, said one or more intermediate nodes not participating in said control signaling.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 99/01749

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04L 12/52, H04J 3/16, H04Q 11/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04L, H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPIL, EDOC, INTERNET, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0428407 A2 (DIGITAL EQUIPMENT CORPORATION), 22 May 1991 (22.05.91), page 6, line 38 - page 7, line 36; page 8, line 21 - page 9, line 12, figures 4,9A,9B --	1-35
A	Journal of High Speed Networks, Volume 3, No 2, 1994, Christer Bohm et al, "The DTM Gigabit Network", page 109 - page 126, figures 6,7,8,9 --	1-35
A	EP 0462349 A1 (INTERNATIONAL BUSINESS MACHINES CORPORATION), 27 December 1991 (27.12.91), claims 1-10 --	1-35

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"I" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

15 March 2000

Date of mailing of the international search report

27 -03- 2000

Name and mailing address of the ISA/

Swedish Patent Office

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 99/01749

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2267199 A (INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE), 24 November 1993 (24.11.93), page 9, line 12 - page 12, line 11, figure 3 --	1-35
A	EP 0214352 A1 (INTERNATIONAL BUSINESS MACHINES CORPORATION), 18 March 1987 (18.03.87), column 4, line 44 - column 5, line 52; column 9, line 54 - column 10, line 39, figures 2A,5 --	1-35
A	US 5164938 A (MARK JURKEVICH ET AL), 17 November 1992 (17.11.92), column 20, line 54 - column 21, line 9, figure 8, claims 1-15 ----- --	1-35

INTERNATIONAL SEARCH REPORT
Information on patent family members

02/12/99

International application No.
PCT/SE 99/01749

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0428407 A2	22/05/91	AU 627953 B AU 6652490 A CA 2029850 A JP 3173235 A US 5313467 A	03/09/92 23/05/91 16/05/91 26/07/91 17/05/94
EP 0462349 A1	27/12/91	DE 69017203 D,T JP 2022732 C JP 4233354 A JP 7054939 B US 5140587 A	10/08/95 26/02/96 21/08/92 07/06/95 18/08/92
GB 2267199 A	24/11/93	DE 4228583 A JP 7193570 A US 5398249 A	18/11/93 28/07/95 14/03/95
EP 0214352 A1	18/03/87	SE 0214352 T3 CA 1250936 A ES 556132 A JP 62043936 A US 4761781 A	07/03/89 16/03/88 25/02/87 02/08/88
US 5164938 A	17/11/92	NONE	

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

15

REC'D 22 NOV 2000

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Applicant's or agent's file reference PC-2008101	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)...	
International application No. PCT/SE99/01749	International filing date (day/month/year) 01.10.1999	Priority date (day/month/year) 02.10.1998
International Patent Classification (IPC) or national classification and IPC ₇ H 04 L 12/52, H 04 J 3/16, H 04 Q 11/04		
Applicant Net Insight AB et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 18.04.2000	Date of completion of this report 07.08.2000
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. 08-667 72 88	Authorized officer Dan Ionesco/EE Telephone No. 08-782 25 00

I Basis of the report

1. This report has been drawn on the basis of *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.)*:

- ☒ the international application as originally filed.
- ☐ the description, pages _____, as originally filed,
pages _____, filed with the demand,
pages _____, filed with the letter of _____,
pages _____, filed with the letter of _____.
- ☐ the claims, Nos. _____, as originally filed,
Nos. _____, as amended under Article 19,
Nos. _____, filed with the demand,
Nos. _____, filed with the letter of _____,
Nos. _____, filed with the letter of _____.
- ☐ the drawings, sheets/fig _____, as originally filed,
sheets/fig _____, filed with the demand
sheets/fig _____, filed with the letter of _____,
sheets/fig _____, filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the supplemental Box (Rule 70.2(c)).

4. Additional observations, if necessary:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/SE99/01749

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	<u>1-35</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-35</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-35</u>	YES
	Claims		NO

2. Citations and explanations

The claimed invention relates to methods for establishing and handling communication channels in a DTM (Dynamic synchronous Transfer Mode) network and to a corresponding arrangement. One purpose of the invention is to provide a solution which decreases the demand for control signaling within circuit switched networks, especially within a DTM network. This is achieved by the features stated in the characterising part of claims 1, 16, and 30.

None of the documents cited in the International Search Report or any combination of them can be considered to disclose the invention as claimed in the claims 1, 16, and 30. The cited documents describe only the general state of the art, which is not considered to be of particular relevance for the invention. Therefore, the methods according to claims 1 and 30 and the arrangement according to claim 16 fulfil the requirements of novelty and inventive step according to Article 33(2, 3).

Dependent claims 2 - 15, 17 - 29, and 31 - 35 disclose further features of the invention according to claims 1, 16, and 30 and fulfil the requirements of novelty and inventive step according to PCT Article 33(2,3).

Claims 1 - 35 also fulfil the requirement of industrial applicability according to PCT Article 33(4).